In this lesson, students will examine the history of certain games, including the Rubik’s Cube.

Texas Essential Knowledge & Skills (TEKS): adopted 2017 effective beginning 19-20 SY

ELA 6-8.12 B-D, F-H.i Inquiry and research:
listening, speaking, reading, writing, and thinking using multiple texts. The student engages in both short-term and sustained recursive inquiry processes for a variety of purposes. The student is expected to:

(B) develop and revise a plan;

(C) refine the major research question, if necessary, guided by the answers to a secondary set of questions

(D) identify and gather relevant information from a variety of sources;

(F) synthesize information from a variety of sources;

(G) differentiate between paraphrasing and plagiarism when using source materials;

(H.i) examine sources for reliability, credibility, and bias

ELA 7-8.12I Inquiry and research:
listening, speaking, reading, writing, and thinking using multiple texts. The student engages in both short-term and sustained recursive inquiry processes for a variety of purposes. The student is expected to:

(I) display academic citations and use source materials ethically

from TEA TAC Chapter 110.21 thru 110.23
Sixth Grade

Students ask open-ended research questions and develop a plan for answering them. Students are expected to:

(B) generate a research plan for gathering relevant information about the major research question

ELA 6.23A, C-E Research/Gathering Sources.
Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:

(A) follow the research plan to collect data from a range of print and electronic resources (e.g., reference texts, periodicals, web pages, online sources) and data from experts;

(C) record data, utilizing available technology (e.g., word processors) in order to see the relationships between ideas, and convert graphic/visual data (e.g., charts, diagrams, timelines) into written notes;

(D) identify the source of notes (e.g., author, title, page number) and record bibliographic information concerning those sources according to a standard format; and

(E) differentiate between paraphrasing and plagiarism and identify the importance of citing valid and reliable sources.

ELA 6.24A-B Research/Synthesizing Information.
Students clarify research questions and evaluate and synthesize collected information. Students are expected to:

(A) refine the major research question, if necessary, guided by the answers to a secondary set of questions; and

(B) evaluate the relevance and reliability of sources for the research.

from TEA TAC Chapter 110.18
Seventh & Eighth Grade

ELA 7-8.22B Research/Research Plan.
Students ask open-ended research questions and develop a plan for answering them. Students are expected to:

(B) apply steps for obtaining and evaluating information from a wide variety of sources and create a written plan after preliminary research in reference works and additional text searches.

ELA 7-8.23A-D Research/Gathering Sources
Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:

(A) follow the research plan to gather information
(B) categorize information thematically in order to see the larger constructs inherent in the information;
(C) record bibliographic information (e.g., author, title, page number) for all notes and sources according to a standard format; and
(D) differentiate between paraphrasing and plagiarism and identify the importance of using valid and reliable sources.

ELA 7-8.24 A-B Research/Synthesizing Information
Students clarify research questions and evaluate and synthesize collected information. Students are expected to:

(A) narrow or broaden the major research question, if necessary, based on further research and investigation; and
(B) utilize elements that demonstrate the reliability and validity of the sources used (e.g., publication date, coverage, language, point of view) and explain why one source is more useful and relevant than another.

from TEA TAC Chapter 110.19-20
Objectives: Students will gain a cross-cultural understanding of the history of gaming.

Materials: Variety of games, suggestions include: Mancala, Chinese checkers, traditional checkers, wooden brain teasers, dominoes, Rubik’s Cubes, parcheesi, Monopoly, Scrabble, etc

Optional reading: Mistakes That Worked, 40 Familiar Inventions and How They Came to Be, by Charlotte Foltz Jones

Procedure: Before class:

- Familiarize yourself with how to play the various games you have available for the students.
- Make copies & cut apart the game cards and mix up the dates, games, and countries of origin. Can have 1 copy per student, per pair, or small group.

Part 1: The History of Games (30 minutes +)

1. Distribute game cards to individual students, partners, or small groups. Instruct students to match the dates with the games the country of origin, and arrange the dates in a timeline order.

2. You can give clues as the students are matching the dates-countries-games, or let students know which ones they have correct when they ask you to check their work. As a clue, you may consider showing pictures of the lesson common games to students. Historical photos may give clues regarding the country of origin and timeline.

3. After you reveal the correct dates and countries, students can create a timeline of the games and their origins and identify their origins on the world map.

4. As time allows, students may play as many of the games mentioned in the matching game as you have available in your classroom.
Part 2: Rubik’s Cube History

1. Look closely at the history of one or more of the games, such as the Rubik’s Cube. Students can research to develop a timeline specific to one game, write a summary, or prepare a presentation for classmates.

2. Make resources available to students to use for research purposes or review the materials together as a class. Potential sources of information for the Rubik’s Cube include:
   
a. History of the Rubik’s Cube (article from Rubiks.com):
      https://www.rubiks.com/about/the-history-of-the-rubiks-cube
   
b. Stuff of Genius, Erno Rubik (video from HowStuffWorks):
   
c. Rubik’s Cube Inventor, Mysteries at the Museum (video from Travel Channel):
      http://www.travelchannel.com/videos/rubiks-cube-inventor-0235646

3. Students can develop a timeline specific to events in the history of the Rubik’s Cube or researched game of their choosing.

Technology Connection: Many of the games have online versions that can be played online:

Senet - https://www.mindgames.com/game/Senet
Mah Jong - https://www.mahjonggames.com/
Backgammon - https://www.classicgame.com/game/Backgammon
Checkers - https://www.classicgame.com/game/Checkers
Optional Follow Up / Extend the Lesson:

Examine the maps in which students marked the games from the matching activity.

- Ask: What continents did we not identify games from? (*South America, Australia, Antarctica*)
- Research to find games popular in countries that are part of these continents. (*Exception* - you probably won’t find anything from Antarctica.)

Students can learn about other familiar inventions from reading short excerpts from the book *Mistakes That Worked, 40 Familiar Inventions and How They Came to Be*, by Charlotte Foltz Jones

Notes to Teacher:

Many of the modern games are adaptations of ancient versions, so you may find alternate countries of origin and dates depending on which sources you reference.

If you want to make additional game cards, you may consider adding:
- 3000 BCE - Egypt - Ur
- 1100’s - China - Dominoes
- 1869 - United States - Parcheesi
- 1933 - United States - Monopoly

This lesson is an adaptation of “Introduction: Ancient Games and Puzzles Around the World,” originally developed by STEM.org™ for *You CAN Do the Rubik’s Cube*.

References:

http://www.checkershistory.com/
http://www.dominogames.com/domino-history.html
http://www.tradgames.org.uk/games/Mah-Jong.htm
http://www.sweetoothdesign.com/games-mancala
http://www.playchinesecheckers.com/CCHistory.html
http://originalpeople.org/senet-and-the-history-of-chess/
## Ancient Games & Puzzles Around the World

### Game Cards

<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>Game</th>
</tr>
</thead>
<tbody>
<tr>
<td>3100 BCE</td>
<td>Egypt</td>
<td>Senet</td>
</tr>
<tr>
<td>500</td>
<td>Ethiopia</td>
<td>Mancala</td>
</tr>
<tr>
<td>600</td>
<td>India</td>
<td>Chess</td>
</tr>
<tr>
<td>1535</td>
<td>France</td>
<td>Checkers</td>
</tr>
<tr>
<td>1880</td>
<td>China</td>
<td>Maj Jong</td>
</tr>
<tr>
<td>1892</td>
<td>Germany</td>
<td>Chinese Checkers</td>
</tr>
<tr>
<td>1948</td>
<td>United States</td>
<td>Scrabble</td>
</tr>
<tr>
<td>1974</td>
<td>Hungary</td>
<td>Rubik’s Cube</td>
</tr>
</tbody>
</table>

Make copies and cut apart cards for each student or group of students.